Force XXI Concept Tested

The Forward Support Company

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During an exercise at Fort Bragg, North Carolina, earlier this year, opposing force units tested an innovative combat service support plan modeled on the Force XXI concept of the forward support company (FSC). This new doctrine, still in draft form, decentralizes brigade logistic assets down to the battalion task force level and places a logistics company in direct support of each task force. Although the test was only a rough approximation of the Force XXI design, it yielded many important lessons for logistics planners who will be charged with executing the new doctrine.

Exercise Purple Dragon 98 involved more than 33,000 soldiers, sailors, airmen, and marines, which made it the largest U.S. maneuver training exercise since World War II. The exercise included operations from Puerto Rico to Fort Bragg, both on land and on the Atlantic Ocean. In the major ground action of the exercise, U.S. forces conducted airborne, heliborne, and amphibious assaults onto "Bragg Island" to liberate it from an occupation force from an aggressor nation.

The 10th Mountain Division at Fort Drum, New York, was originally tasked to provide a brigade task force to act as opposing force (OPFOR), but a devastating ice storm prevented the deployment. In less than two weeks, planners built an ad hoc organization to serve as OPFOR. This composite force included a brigade headquarters from the 10th Mountain Division charged with command and control of three distinct maneuver battalion task forces. The 2d Battalion, 187th Infantry, from the 101st Airborne Division (Air Assault), and the 1st Battalion, 505th Infantry,

from the 82d Airborne Division, became OPFOR Task Forces 1-73 and 2-73, respectively.

Task force 3-73 consisted of a composite force led by the 30th Engineer Battalion and rounded out by various units from the 20th Engineer Brigade, XVIII Airborne Corps. This battalion of engineers, approximately 250 strong, fought as infantry during the exercise and brought their own unique ideas on service support. The result was an unusual collection of battalion size units that produced a variety of approaches to implementing the FSC concept.

The service support package for the exercise was ad hoc as well. Because the 10th Forward Support Battalion (FSB) from Fort Drum was busy supporting disaster relief operations in the wake of the ice storm, a combination of XVIII Airborne Corps units made up the combat service support slice. The 307th FSB, 82d Airborne, contributed assets to augment the infantry battalion trains, thereby creating the FSCs. The 264th Corps Support Battalion (CSB) formed the base support element, eventually named the Base Support Company (BSC). Under current modified tables of organization and equipment, this amalgamation of assets was necessary to approximate Force XXI logistics doctrine, since a standard FSB does not have enough assets to outfit three FSCs and a BSC. The size and number of Corps Support Command (COSCOM) units involved in the exercise made it possible to implement this new concept of OPFOR support.

Using FSCs during the exercise was not a conscious decision to use new doctrine but a matter of necessity that came out of mission analysis. The exercise scenario prompted OPFOR logistics planners to gravitate toward a concept of support that would enable the maneuver battalions to be logistically self-sufficient for five or six days. The "aggressors" would command the air and ground lines of communication. There would be little opportunity for the OPFOR to logistically assist its forward battalion task forces once the battle was joined. Additionally, any large base would be extremely vulnerable to air or ground attack. Finally, the logistics support to the task forces would have to be extremely mobile in order to make frequent survivability moves. conditions demanded that maneuver units be self-sufficient and led to a combat service support plan that relied upon dispersed and mobile assets along with extensive caches.

To achieve self-sufficiency in the task force, planners replaced the brigade support area (BSA) and the traditional battalion trains with a base support company and three composite forward logistics elements (later named FSCs). The base element located along the boundary between two battalion sectors had the primary mission to reinforce the support elements of the battalion task forces. This BSC contained bulk fuel and water assets capable of refilling battalion HEMTT (heavy expandedmobility tactical truck) tankers and water trailers. A CSB headquarters provided command and control to this element. The 307th FSB provided assets to augment the battalion trains to produce the provisional FSCs for each task force. To assist the battalion S-4s and HHC commanders, the FSB also provided a lieutenant to act as support operations officer. The composition of these support elements is shown in the accompanying table.

The purpose of constructing the FSCs was to enable each battalion task force to be largely self-sufficient for five or six days of battle. The core of the package was made up of the battalion field and combat trains that provided command and control, water, medical, and organizational maintenance assets. FSB assets augmented the battalion trains to make selfsufficiency possible. Each unit carried or cached five-day supplies of water and rations. The addition of a palletized loading system truck to the FSC allowed the task force to keep rations uploaded to maintain maximum mobility. With the three cargo trucks, the infantry could move up to three platoons around the battlefield, adding to the units' tactical mobility. The tanker allowed units to operate for 48 hours before going to the BSC to refuel. The end result was a package that gave each task force commander a robust and mobile logistics base that could respond quickly to the maneuver companies.

To implement the FSC concept, planners first had to surmount the learning curve that is created whenever new doctrine is introduced. Four logistics nodes distributed around the battlefield with distinct FSCs in direct support to each task force is quite different from normal LOGPAC (logistics package) operations conducted by echeloned trains out of a brigade support area. Light infantry battalion S-4s and headquarters company commanders are not accustomed to maneuvering PLS (preservative, lubricant, solvent) trucks, fork lifts, and tankers. In addition, infantry officers felt that they were receiving a forward support company and not merely an augmentation to their own internal asssets. It took some time to emphasize to them that their own trains formed the bulk of the FSC. This mind-set was important because these infantry officers needed to realize that these assets were theirs to task organize and maneuver on the battlefield. The actual implementation of Force XXI logistics will mitigate some of the problems, since the doctrine is projected to apply only to mechanized and ar-

Base Support Company	Forward Support Company x 3
C2 element from the CSB or FSB	C2 element (Bn S-4, HHC Cdr, FSB SPO)
Heavy maintenance support and recovery for the mechanized company	Combat and field trains
Light maintenance support team	3 x M149 water trailers
5 x 3,000-gallon fuel tankers	Battalion medical platoon
2 x 5,000-gallon water tankers	HEMTT fuel tanker
Transportation slice	DS maintenance support
- 2 x 5-ton cargo trucks	Transportation slice
- 2 x PLS trucks	- 3x 5-ton cargo trucks
- Rough terrain forklift	- 1 PLS truck for rations
Additional fuel assets (MOGAS, kerosene)	- Rough terrain forklift
Forward treatment team with FLAs	Point supply system (FAWPSS)

mored forces and each FSC is a distinct organization with its own command and control element.

There was some resistance to the FSC concept, although this abated as time went on. The advantages of increased responsiveness in support are tempered by the disadvantages of the increased signature these additional assets create in a battalion area of operations. Battalion S-4s now had to organize, protect, and maneuver a logistics base almost twice its normal size. The weather cooperated during the exercise, but some planners expressed concern over their ability to manage and maintain some 30 pallets of rations. Again, the implementation of this new doctrine will alleviate some of these concerns. since the FSC commander will be familiar with his own organization, and he will be able to train on its employment.

One other new condition introduced by this method of support was the addition of women in front line infantry One FSC support battalion sectors. operations officer was a woman, and each infantry battalion had three women serving in maintenance or driver specialties. This did not affect the quality of support rendered to the infantry units, but it did require some minor adjustments to accommodate a dual-gender force. FSC doctrine definitely means that the Army's leaders will have to look again at the issue of women serving at the forward line of troops.

The final assessment of the feasibility of the FSC concept by the OPFOR logisticians was positive. In the end, the advantages of responsiveness outweighed the problems of signature. The design for self-sufficiency was a success. Throughout the eight days that the OPFOR was in the maneuver box, units reported green on all classes of supply except ammunition. But limitations on Class V were really a function of training ammunition accounts, not a limitation imposed by the FSC concept. Bulk fuel and water were also potential shortages even though the increased organic liquid haul capability more than doubled the amount of time the unit could operate without resupply. Units anticipated and accounted for this challenge by increasing the use of fivegallon cans. Also, support platoon leaders were able to launch periodic transport missions to the base support company for wholesale resupply.

Rations were plentiful in both carried stocks and caches due to the increased haul capacity provided by the PLS trucks. Battalions could break rations to companies quickly by dropping off flat racks and retrieving them later. Self-sufficiency in rations also reduced the vulnerability of logistics operators. Shorter resupply routes to the forward companies and the elimination of the need for battalions to go to a BSA created fewer opportunities for enemy ambush or detection.

Direct support maintenance assets traveled with the trains and provided responsive support within the limitations imposed by having only the prescribed load list items that they could carry with them in their trucks. Each battalion had direct support maintenance for automotive, armaments, and

communications. As is often the case in training exercises of short duration, however, maneuver units did not bring many jobs to the attention of the maintenance operators, so the true worth of this asset was not tested to any significant degree.

The effect of the increased signature of the trains is difficult to assess. The U.S. enemy had virtually unlimited collection assets, and the survivability of any kind of trains was always doubtful. Three of the four logistics nodes on the battlefield were harassed or attacked almost daily. Since OH58D helicopters found anything with an antenna or a tent, the ability to hide was extremely limited. At least one FSC did jump frequently, somewhat validating the tactical mobility planners intended. But this tactical mobility was of limited value on a battlefield made transparent by a multitude of assets capable of finding and tracking movements. Future FSC commanders will need to get a "front-line" mind-set and train hard to enhance survivability.

The forward support company concept, as applied during this exercise, provided some limited support for the new doctrine. Even with infantry logisticians unaccustomed to the doctrine or the assets, there was overall approval of this method of support. Extremely responsive support and increased selfsufficiency are powerful lures to maneuver commanders, and these advantages insured general acceptance of a new way of doing business. In practice, the delivery of support was simplified for logisticians at all levels. Battalions did not have to ask for assets, and brigade planners did not have to figure out how to get routine resupply packages forward.

The limits on the value of this experiment lay mostly in the fact that infantry logisticians implemented the concept of support with an ad hoc organization within an extremely short

planning and preparation period. An FSC commander with organic assets and established doctrine could certainly overcome many of the difficulties that planners encountered in this exercise. Furthermore, U.S. units working with the advantages of superior intelligence and air and ground dominance would be even more agile without the same level of worry over a relatively vulnerable FSC located close to the front lines. In all, forward support company doctrine appears to make sense for U.S. maneuver units.

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